(11) Application No. AU 199941153 A1 (12) PATENT APPLICATION **AUSTRALIAN PATENT OFFICE** (19) Title (54)Herbal tampon International Patent Classification(s)  $(51)^7$ A61K 035/78 A61K 009/00 A61K 009/70 Application Date: 1999.07.28 (22)Application No: 199941153 (21)2000.06.08 Publication Date: (43)Publication Journal Date: 2000.06.08 (43)Divisional of: (62)199532971 Applicant(s) (71)Trevor William Lucas Inventor(s)
Trevor William Lucas (72)Agent/Attorney (74) Dr Kevin M Pullen, PO Box 241, LANDSBOROUGH QLD 4550, Australia

#### ABSTRACT:

A herbal tampon is disclosed. A herbal tampon consists of a thin layer of spray dried herbal preparations

(1) (as illustrated in the cut away drawing. FIG. 1) following the concentric layers (2) of the tampon material.

The tampon material (3) may be of organic or synthetic, or a combination of both, and comply with Australian Standards for tampons.

A thin tampon cord (4) imbedded the full length of the tampon, shall extend for no less than 120mm from the base (5) of a herbal tampon. The tip (6) of the tampon shall be rounded to allow for ease of vaginal insertion.

A herbal tampon shall be used during periods of menstrual discharge as recommended for normal tampon usage.



# AUSTRALIA Patents Act 1990

P/00/01 Regulation 3.2

Revised 2/9:

		Original Complete Specification Standard Patent
F	Inv	rention Title
		HERBAL TAMPON
	+-	
	-	
L		
	Th	e following statement is a full description of this invention, including the best method of performing known to me:-
	٦	
	}	AS FOLLOWS:
	ļ	
	: }	<i>,</i>
•		
:		
••		
••		
••		;
••		
•		

## HERBAL TAMPON

This invention relates to the addition of spray dried herbal preparations to the concentric layers of menstrual tampons to greatly enhance the limited function of mentioned tampons.

In the present form, tampons only offer the benefit of providing absorbency during times of menstrual discharge.

Herbal preparations, the type of which being beneficial in alleviating or regulating discomforts associated with menses, are normally administered orally, or by pessary or vaginal douche. Such methods offer indirect action, provide additional vaginal discharge, and are time consuming and inconvenient, respectively.

The problem of administration of herbal preparations may be overcome by the use of a combination of soluble spray dried herbal powders enclosed within the concentric layers of a menstrual tampon during or prior to the time of manufacture of such a tampon. The herbal preparations in mention exist in a form in a form used by practitioners of Eastern and Western herbalism, and currently used in Australia and meeting the Therapeutic Goods Regulations governing their use.

10

Supply of such spray dried herbal preparations may be available through distributors in Australia and overseas, an example being ChinaHerb Company (Aust.) P/L.

The combination of spray dried herbal preparations will

- 25 be as follows:
  - \* Angelica sinensis (Dong Quai)

Anti-inflammatory, antianaemic, antiplatelet, uterine tonic.

\* Rehmannia Glutinosa(Shu Di Huang)

Anti-inflammatory, antihaemorrhagic, antianaemic, useful

- 10 for amenorrhoea and metrorrhagia.
  - \* Corydalis ambigua

Analgesic, sedative.

\* Paeonia lactiflora (Bai shao)

Antispasmodic, anti-inflammatory, analgesic

15 \* Grapefruit Seed Extract (Powder)
Broad-spectrum bactericide, fungicide. An example of such
a product is Citricidal R.

Enclosed within the concentric layers of each herbal tampon will be a quantity of two grams of the herbal preparations.

20 The herbal preparation shall be evenly spread in a thin layer from the centre to the periphery of the herbal tampon following the concentric layers, while extending the full length of the tampon.

Such layering of the herbal preparations shall give a slow 25 release of the active constituents of the herbal preparations. This

occurring when the herbal tampon is placed vaginally according to manufacturers guidelines, and exposed to the moisture of menstrual discharge.

Absorption occurring through the vaginal mucosa, directly into the vascular system. The addition of the herbal preparations shall not unnecessarily add bulk to the tampon once manufactured.

The combination of therapeutic actions of the herbal preparations have the affect of relieving conditions often associated with menstruation, such as, dysmenorrhoea, abdominal cramping and irregularity.

A herbal tampon may be manufactured of an organic, synthetic material, or a combination of both, as specified by manufacturers. While complying with all requirements of the Australian Standards associated with tampons.

15 A herbal tampon shall be in varying sizes, for example, 6-9ml; 9-12ml; 12-15ml, in order to cater for light to heavy menstrual discharge, respectively.

The external appearance of a herbal tampon, with the inclusion of a thin cord to assist insertion and removal of the tampon,

20 shall appear the same as, or similar to tampons presently available to the public.

Details of the active constituents are as follows:

# Citricidal Powder

Grapefruit extracts (Seed and Pulp)50% Silicon Dioxide - USP 30% Glycerin - USP 20%

5 Solubility: Water soluble, organic and alcohol solvents.

Potent, effective broad-spectrum bactericide, fungicide,
antiviral, antiparasitic.

Chemical Description: Diphenol hydroxybenzene complex.

# Corydalis ambigua

Used for visceral pain, pain from injury and dysmenorrhoea. Analgesic effects shown to be 40% that of morphine . (9)

Traditionally used as an analgesic and sedative

## 5 Active Constituents:

d1-Tetrahydropalmatine (THP) and Corydalis L (alkaloids)

# Rehmannia glutinosa (Shu di huang)

Usefullin cases of anaemia, weakness, metrorrhagia and amenorrhoea.

Traditionally used as an anti-inflammatory and antihaemorrhagic (May be used instead of licorice)

# 5 Active Constituents:

Jionoside Al and B2 (glycosides Jioglutosides and Jioglutins (monterpines)

### Dong quai

Used for conditions such as irregular menses, dysmenorrhoea and amenorrhoea May be indicated in PMS, in cases of endometriosis and as a blood builder in anaemia.

5 Traditionally used as a uterine tonic, anti-inflammatory and spasmolytic.

#### Active Constituents:

Ferulic acid n-Butylidenphthalide, ligustilide and butyphthalide nicotinic acid

### Paeonia lactiflora

Used for female reproductive disorders, such as dysmenorrhoea, leucorrhoea, excessive bleeding (uterine) and cramping.

Traditionally used as a spasmolytic, anti-inflammatory, mild skeletal muscle relaxant and astringent.

### Active Constituents:

Paeoniflorin
Benzoylpaeoniflorin, albaflorin, oxypaeonflorin and pentagallolglucose.

Paeonia is often combined with Glycyrrhiza glabra (Licorice) in the 10 treatment of dysmenorrhoea

Active Constituents: Glycyrrhizin (Glycoside) Liquititin (Flavonoid)

Traditionally used for anti-inflammatory, demulcent and spasmolytic properties.

To assist with understanding the invention, reference will now be made to the accompanying drawings, showing an example of a herbal tampon.

In the drawings:

5 FIG. 1 shows a cut away section of herbal tampon. displaying the thin layers of spray dried herbal preparations following the concentric layers of the tampon.

FIG. 2 shows an end view of a herbal tampon, displaying the layers of spray dried herbal preparations and the tampon material of construction.

NB. Drawings are not to scale.

The claims defining the invention are as follows:-			
1. A Herbal Tampon contains a thin layer of spray dried			
herbal preparations, giving this tampon a therapeutic			
qualities as well as absorbency when used during periods			
5 of menstrual discharge.			
2. A Herbal Tampon of Claim 1. consists of an organic or			
synthetic material, or a combination of both, to form a			
tampon, with spray dried herbal preparations following			
the concentric layers of the material forming the tampon,			
10 from centre to periphery.			
3. A Herbal Tampon of Claim 1., from external appearance			
shall appear to be the same as or similar to tampons			
currently available to the public.			
4. A Herbal Tampon substantially as herein described, with re-			
reference to the accompanying drawings.			
A".			
Name Of Applicant Signature Date			

\*Note: If there is insufficient space above to type the statement of claim, do not use this sheet, but use separate sheets of paper beginning with the words "The claims defining the invention are as follows:" and ending with the date and name of applicant in block letters.



